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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,030	12/23/1999	MASANORI WAKAI	35.C14127	6923

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EXAMINER
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SPOONER, LAMONT M

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/471,030

Applicant(s)

WAKAI ET AL.

Examiner

Lamont M. Spooner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19, 24-41 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19, 24-41 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/2/04 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 7/2/04 have been fully considered but they are not persuasive.

In response to applicant's argument, page 14, para. 1, regarding claims 1, 23, and 45, "nothing has been found in Namba et al. that would teach or suggest storing the information input from each of the plurality of input means with an input time thereof, sorting at least two types of information stored in the storage means in an order in accordance with the input time, and analyzing a sequence of the at least two types of information sorted in the input time order by the sorting means, as recited in claim 1."

However, Namba explicitly teaches storing information input from each of the plurality of input means with an input time thereof (C.12.lines 43-45-stores he result, Fig. 1 items 1,2,3-plurality of input means), sorting at least two types of information (C.12.lines 62-67-voice, sound, music-the Examiner has interpreted voice, and applause as two different types of information-the extraction/division thereof is interpreted as the sorting thereof) stored in the storage means in an order in accordance with the input time (time-stamped and concurrent signals, simultaneous input is interpreted as the time accordance of the sorting, the order being, C.14.lines 1-5, the respective divided (or extracted) information, the respectivity indicating the order, based upon the input time (C.13.lines 54),

and further teaches input analyzing means for analyzing a sequence (col. 7, lines 15-24, his recognition result selecting section 4 and his semantic analyzing section 5, col. 8, lines 38-46, lines 61- 67, col. 10, line 35-50) of the at least two types of information (C.13.lines 64, 65, C.14.lines 30-37-divided operation is interpreted the sorted/extracted information) sorted in the input time order (C.14.lines 17-55, ""this" indicates data around the coordinate (12, 23), based on the time "14(H): 25(M): 34 (S)" at which time the touch-panel was touched, and the estimated time stamp "14(H):25(M):33(S)" for "this""-Interpreted as the time order, and this information has been sorted in the input time order, -C.14.line 65-c.15.line 37-"this here"-sequence- which is sorted in an order accordance with the input time, c.15.lines 40-47-analysis).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 12-19, 23, 34-41 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Namba et al (5,884,249).

As per claims 1 and 23, Namba et al teach an information processing apparatus comprising (figures 1, 2, 9, 13 and 15):

a plurality of input means for inputting different types of information (his voice recognition section 1, his touch panel section 2, his keyboard section 3, col. 6, lines 50 to col. 7, line 1 5)-,

storage means for storing information input from each of said plurality of input means with an input time thereof (his recognition selecting section 4, \*1. 2, lines 10-19, lines 24-32, his input time stamp recognition); and

sorting means for sorting at least two types of information (C.12.lines 62-67-voice, sound, music-the Examiner has interpreted voice, and applause as two different types of information-the extraction/division thereof is interpreted as the sorting thereof) stored in said storage means in an order in accordance with the input time (time-

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stamped and concurrent signals, simultaneous input is interpreted as the time accordance of the sorting, the order being, C.14.lines 1-5, the respective divided (or extracted) information, the respectivity indicating the order, based upon the input time (C.13.lines 54),

input analyzing means for analyzing a sequence (col. 7, lines 15-24, his recognition result selecting section 4 and his semantic analyzing section 5, col. 8, lines 38-46, lines 61- 67, col. 10, line 35-50) of the at least two types of information (C.13.lines 64, 65, C.14.lines 30-37-divided operation is interpreted the sorted/extracted information) sorted in the input time order (C.14.lines 17-55, ""this" indicates data around the coordinate (12, 23), based on the time "14(H): 25(M): 34 (S)" at which time the touch-panel was touched, and the estimated time stamp "14(H):25(M):33(S)" for "this""-Interpreted as the time order, and this information has been sorted in the input time order, -C.14.line 65-c.15.line 37-"this here"-sequence-which is sorted in an order accordance with the input time, c.15.lines 40-47-analysis) by said sorting means.

As per claim 12, Namba et al teach wherein said input means can input key information (figure 1, his inputting means group 121).

As per claims 13, 16 and 17, Namba et al teach wherein said input means can input character information by converting the key information (figure 1, his touch panel 2 and his keyboard 3).

As per claim 14, Namba et al teach wherein said input means can input speech information (His voice recognition 1)).

As per claim 15, Namba et al teach wherein said input means can input character information by recognizing the speech information and converting the speech information into character information (his inputting means group 121).

As per claims 18-19, Namba et al teach wherein said input means can input handwritten information (figure 15, a graphic recognition section 143 which recognizes hand-written or printed characters of figures at col. 27, lines 38-67).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-11 and 24-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al (5,884,249) in view of Jackson et al (6,292,767 B1).

As per claim 2, It is noted that Namba et al teach the claimed invention but do not explicitly teach wherein said input analyzing means includes: "input information concept instance generating means for generating a concept instance from each piece of the input information "; and "concept instance unifying means for unifying a plurality of generated concept instances. However, these features are well known in the art as evidenced by Jackson et al who teach:

"input information concept instance generating means for generating a concept instance from each piece of the input information" (figure 3, his interpretations 270, col. 3, lines 4-22); and

"concept instance unifying means for unifying a plurality of generated concept instances" (col. 3, lines 22-58, his user specification of application semantic comprising several computer resident files). Therefore, one having ordinary skill in the art at the time the invention was made would have it obvious to incorporate into the input information analyzing unit of Namba et al the user specification as taught by Jackson et al because it would provide a development system that allow a developer to easily create natural language understanding systems.

As per claim 3, Jackson et al teach wherein the concept instance includes a type of a slot and an instance corresponding to the slot of the type ( col. 3, lines 4-22, his command type slot 340 with a value "transfer")

As per claim 4, Jackson et al further comprising:

"a database for storing the input information and information necessary for generating the concept instance, in one-to-one correspondence"; ( figure 4b, his user specification of applications semantics , col. 3, lines 37 to col., 4, line 20),. and

"retrieving means for retrieving information necessary for generating the concept instance corresponding to the input information, from said database, (col. 3, lines 45-57)., and



wherein said input information concept instance generating means generates the concept instance in accordance with the information retrieved from said database (col. 3, line 22 to col. 4, line 20).

As per claim 5, Jackson et al teach wherein said database stores a concept type, a rule necessary for the concept instance, and a rule necessary for a surface layer word, respectively corresponding to a surface layer character string. (col. 3, lines 22 to col. 4, lines 20, his slot definition file 420, his grammar file 430 and his slot classes 440).

As per claim 6, Jackson et al teach wherein said unifying means unifies the concept instances in accordance with the rules ( figures 4a and 4b, col. 3, line 22-57).

As per claim 7, Jackson et al teach wherein said database stores, as a definition of a concept, a slot type of a slot which the concept instance can have, and a rule which is required to be satisfied by the instance corresponding to the slot (figures 4a-4b, col. 3, lines 22-27, his slot definition file and his grammar file).

As per claims 8, Jackson et al teach wherein said unifying means unifies the concept instances in accordance with the rule designated by the definition of the concept corresponding to the type of the concept of the concept instance (col. 3, lines 22 to col. 4, lines 20)

6. Claims 23-41 and 45 are the same in scope and content as claims 1-19 above and therefore are rejected under the same rationale.


***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571/272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms  
6/5/05

  
**RICHEMOND DORVIL**  
**SUPERVISORY PATENT EXAMINER**